



Risk & Profit  
Manhattan, Kansas  
25th August 2023

## Changing Market Dynamics

Presented by: Guy H. Allen  
IGP Senior Economist



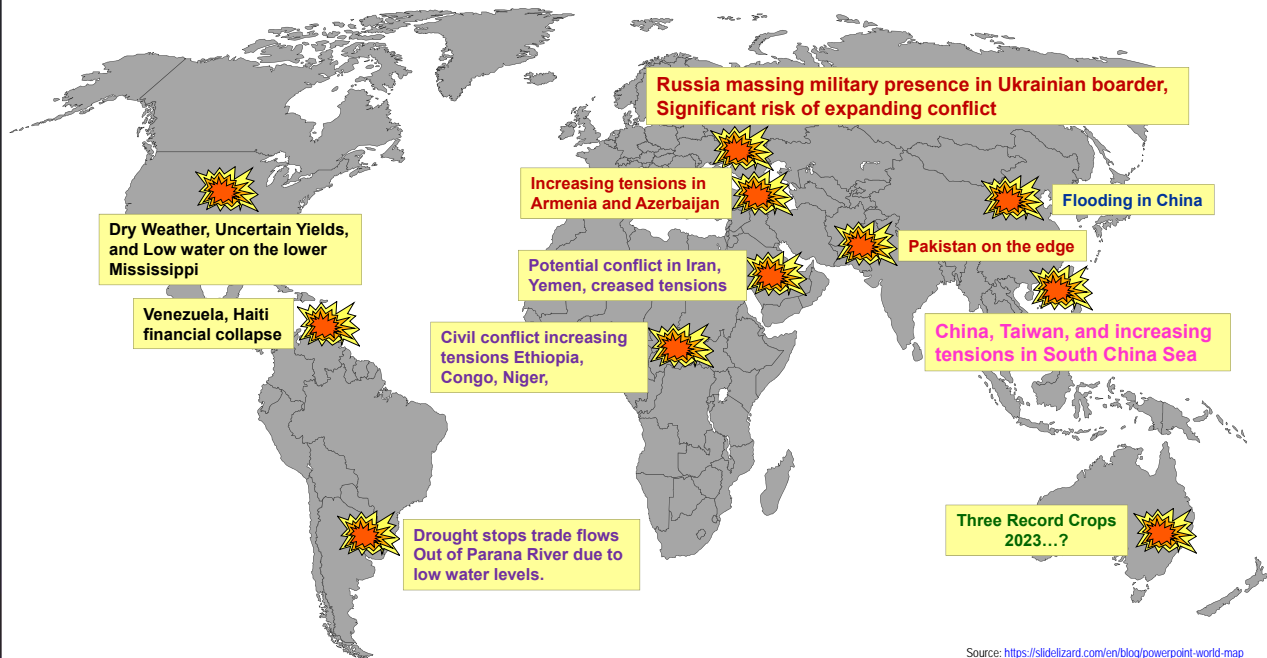
**KANSAS STATE**  
UNIVERSITY | Department of Grain Science  
and Industry

Current Market Outlook & Issues

### Outline for Today

- GEO-POLITICAL ISSUES
- MARCO ECONOMIC – U.S. DOLLAR AND FOREIGN EXCHANGE
- OCEAN FREIGHT AND TRANSPORTATION
- CHANGING OILSEED CRUSH DYNAMICS
- WEATHER

## Geo-Political Hot Spots



## MARCO ECONOMIC AND GEO-POLITICAL ISSUES

Today's primary drivers of commodity markets...

## Geo-Political Risks

- **Russia** – re-emergence as a major power (Central Asia, Eastern Europe, Middle East, and China)
  - Ukraine and collapse of Black Sea Grain Initiative
  - Unilateral trade agreements, China, Turkey, India, Middle East and African...
- **China** – U.S. Relations and the “Thucydides Trap”
  - Strategic diversification of country of origin supplies;
  - Taiwan - China: China and their Claim to the South China Sea;
  - Import Tariffs and Restrictions: China, U.S., etc...
- **Increasing government concern on food security,**
- Increasing government policies to restrict trade, protect markets, and domestic food prices and security; (Export Taxes and Restrictions: Argentina, Russia, India, etc...)



## Current Market Overview, Outlook & Issues

### U.S. Dollar Index

U.S. Dollar Index Cash (DXY00) - Barchart.com

➤ **Major Foreign Exchange Rate Indicators:** as of the 22<sup>nd</sup> of August 2023

	TW	LW	Year ago	% Chg. yoy
US Dollar Index	103.563	103.209	109.046	- 5
Arg. Peso	350.0000	349.9500	136.650	+ 156
Aus. Dollar	1.5569	1.5427	1.4556	+ 7
Brazil Real	4.9370	4.9753	5.1669	- 4
Canada Dollar	1.3547	1.3474	1.3037	+ 4
Euro	0.9222	0.9153	1.0066	- 8
Japan Yen	145.7800	145.4000	137.5700	+ 6
Russia Rouble	93.2500	96.6250	59.1250	+ 58

Source: International Grains Council



Source: Barchart - <https://www.barchart.com/futures/quotes/DXY00/interactive-chart>

#### Monthly Nearby

20 Year History

24<sup>th</sup> Aug 2023 = 103.990

September 2022 = 114.778

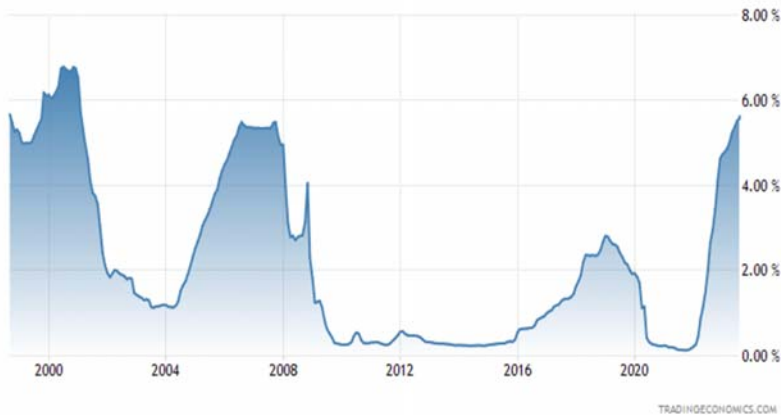
February 1985 = 164.720

June 2001 = \$121.020



## Current Market Outlook & Issues

# U.S. Interest Rates



Source: U.S. Bureau of Labor Statistics, Trading View Aug23 - <https://tradingeconomics.com/united-states/currency>

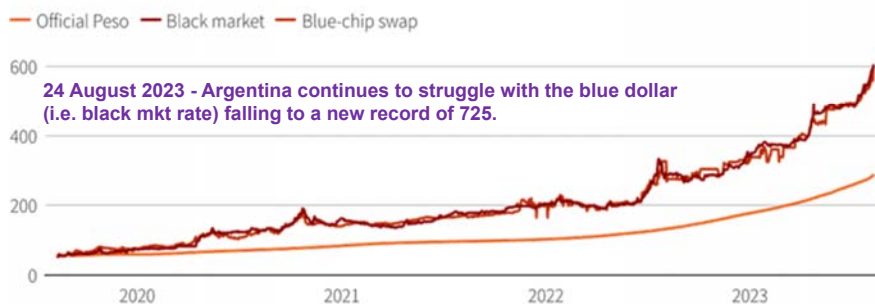
## Current Market Overview, Outlook & Issues

# Argentina Peso



### Argentina: peso unpegged?

Argentina has seen parallel peso/dollar FX rates diverge sharply since a political upset in 2019. The long-embattled currency has hit 600 per dollar in the black market this month, over twice the official price, ahead of crunch primary elections.



Note: Data is Argentine pesos per dollar  
Source: Refinitiv Eikon

Source: Barchart - <https://www.barchart.com/futures/quotes/ZSH21/interactive-chart>

Argentina's central bank raised the benchmark interest rate to **118%** from **97%** previously.

Official currency rate devalued to **350 pesos / US Dollar**

Latin America's third-biggest economy is battling a severe economic crisis with sky-high inflation and dwindling central bank reserves.

The official peso plunged nearly 18% on Monday morning to just over 350 pesos per dollar and the source said the exchange would be fixed at this rate until the October presidential vote.

- Argentina's presidential frontrunner wants to dollarize the economy, but many already use the greenback.
- Private firms in the country are partially paying in dollars to retain skilled workers.
- And more businesses are accepting dollars as payment as the peso crashes..

## Current Market Overview, Outlook & Issues

# Russian Ruble



Monthly Nearby

15 Year History

24<sup>th</sup> August 2023 = 94.57

Ruble hits 16 month low.



Source: Barchart - <https://www.barchart.com/forex/quotes/%5ERUBUSD/interactive-chart>

## Current Market Overview, Outlook & Issues

# Chinese Yuan



Monthly Nearby

15 Year History

24 August 2023 = 7.2778



Source: Barchart - <https://www.barchart.com/futures/quotes/ZSH21/interactive-chart>

- Chinese yuan is trading close to its 2023 lows.
- Currency has plunged 5% this year amid signs of Chinese economic weakness.
- Beijing is battling weaker-than-expected growth, deflation, and plunging exports.

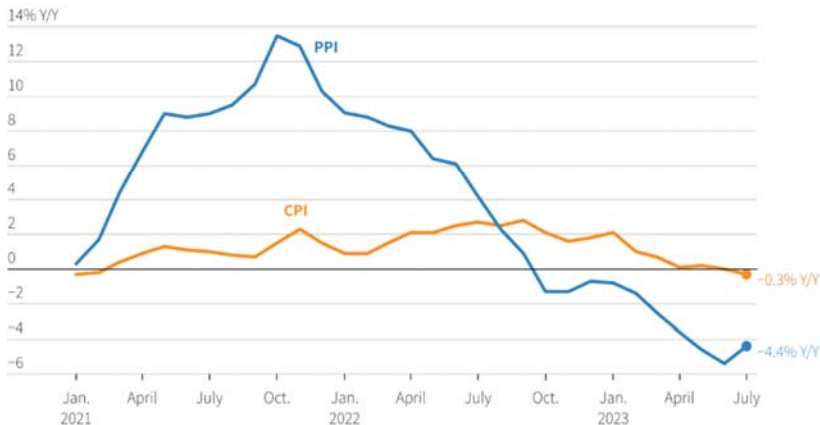
## Current Market Overview, Outlook & Issues

# U.S. Crude Oil WTI – Nearby Monthly



### China in deflation

China's consumer prices fell into deflation in July for the first time since February 2021, while factory gate prices extended their declines, as the world's second-largest economy struggled to revive demand.



Source: Refinitiv Datastream | Reuters, August 9, 2023 | By Kripa Jayaram

- Beijing is battling weaker-than-expected growth, deflation, and plunging exports.

Beijing has set a consumer inflation target of around 3%, which would be up from 2% recorded in 2022,

authorities are downplaying concerns about deflation.

The consumer price index (CPI) dropped -0.3% year-on-year in July, said National Bureau of Statistics (NBS), compared with the median estimate for a 0.4% decrease in a Reuters poll. It was the first decline since February 2021.

## Geo-Political Risks – Debt Crunch or Default

Below is a look at countries that face a debt crunch or have already defaulted on international loans:

- UKRAINE
- EGYPT
- PAKISTAN\*
- SRI LANKA\*
- PAKISTAN\*
- VENEZUELA\*
- LEBANON
- EL SALVADOR
- TUNISIA
- GHANA
- MALAWI
- ZAMBIA

# Risks to U.S. Economy

Economic risks and significant headwinds for the U.S. economy:

- Continued tightening of US Monetary Policy, i.e.
    - Higher Interest Rates.
    - Strong U.S. Dollar, particularly against importers of U.S. Commodities
  - Slow economic growth in Europe and China,
  - Higher Energy Prices, driven by current administration policies and regulatory approach,
  - Increasing environmental regulations,
  - Persistent U.S. domestic tensions are not likely to wane,
- 
- ❖ Move away from a globalized economy to regionalized relationships,
  - ❖ U.S. global hegemony under attack, as well as U.S. Dollar status as world's reserve currency.

**All are having a significant impact on commodity prices...**



## Current Market Overview, Outlook & Issues U.S. Crude Oil WTI – Nearby Monthly



### Nearby Cash WTI Crude Oil

US\$/barrel

25 Year History

24 Aug 2023 = \$79.05

??????

July 2008 = \$145.66

Mar 2022 = \$123.70

Jun 2022 = \$121.11

Super Cycle

- 1973 -  
- 2007 -



Source: Barchart - <https://www.barchart.com/futures/quotes/ZSH21/interactive-chart>

## Current Market Overview, Outlook & Issues

### U.S. Ethanol – Nearby Monthly



#### Nearby Futures CME Ethanol

US\$/barrel

15 Year History

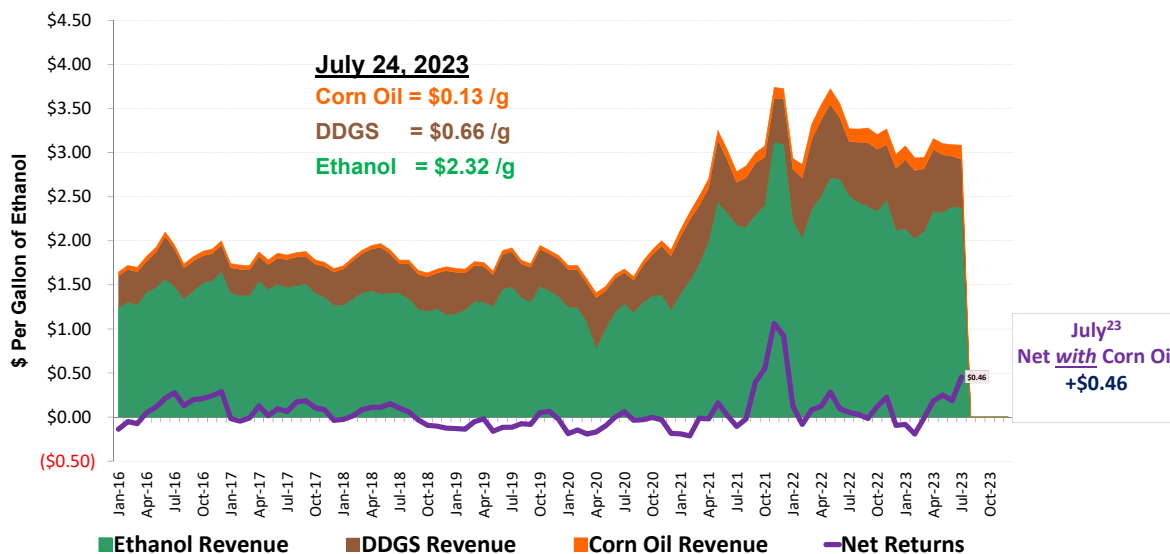
24<sup>th</sup> Aug 2023 = \$2.1450

Nov 2021 = \$3.4500

April 2014 = \$3.3400

## Current Market Overview, Outlook & Issues

### Ethanol Revenues & Net Returns



Source: ISU Ethanol Plant Model (January 2007 – July 24, 2023)



# Fundamental Issue Impacting Commodities

## Prices

- Historically high "Flat" price volatility,
- Historically high "Basis" price volatility,
- Strong U.S. Dollar, particularly against currencies of importers of U.S. commodities.

## Supply & Demand Issues

- Wheat tight Ending Stocks situation, can no longer afford to be priced as a feed grain
- Corn & Feed Grains at historically tight Ending Stocks situation
- Soybean & Oilseeds at historically tight Ending Stocks situation
- Increasing volatility and costs of fossil fuels; crude oil, coal, natural gas, nitrogen fertilizers
- Tightening supplies and higher prices for phosphate and potassium fertilizers

## Weather

- Changing regional weather impacts;
- Dry weather in the U.S.,
- Flooding in China,
- Dry in Argentina and Paraguay as Parana River is at lowest level in 77 years, frustrating exports from Argentina, southern Brazil and Paraguay;
- Shift from La Nina to El Nino...?



# OCEAN FREIGHT

Blue Water Shipping...

## Ocean Freight Overview London Baltic Exchange – Dry Index



Published on TradingView.com, Aug 14, 2023 10:57 UTC

BALTIME DRY INDEX, 10, INDEX: 1151 -41 (-3.60%)

### > Ocean Freight Route Prices (US\$/mt) as of the 18<sup>th</sup> August 2023

	TW	LW	LY	%Y/Y
US Gulf to EU (Rotterdam) a)	29	28	30	- 2
US Gulf - Japan a)	52	50	54	- 4
US Gulf - Mexico	15	14	20	- 26
EU (Rouen) - Algeria	17	17	25	- 29
Russia - Egypt	15	14	23	- 33
Argentina (Up River) - EU (Rotterdam)	36	34	37	- 2
Brazil - China a)	49	48	52	- 5
Brazil - EU (Rotterdam) a)	29	28	30	- 2
Australia (Kwinana) - China a)	20	19	24	- 19

a) Over 50,000 mts. Source: International Grains Council visit: [http://www.igc.int/grainsupdate/igc\\_qoi.xlsb](http://www.igc.int/grainsupdate/igc_qoi.xlsb)



TradingView

Source: Trading View - <https://www.tradingview.com/chart/?symbol=INDEX%3ABDI>

### Dry Bulk Index – 1151

24<sup>th</sup> August 2023 - 1151

8<sup>th</sup> October 2021 - 5650

### ❖ Low water on the Panama Canal

Low water levels driving weight restrictions and reductions in daily Panama Canal transits has created a backlog of about 150 ships waiting – some for more than a week – for passage.

Some shippers via the Panama Canal will likely experience delays in receiving shipments, but with excess capacity available in the market – and more coming soon – there should be enough slack and alternatives, if necessary, to keep rates from reaching extreme heights.

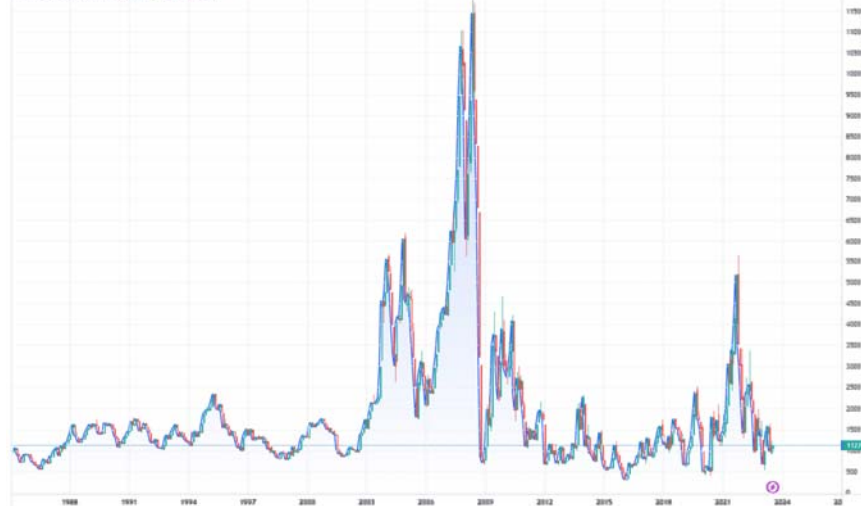
## Ocean Freight Overview London Baltic Exchange – Dry Index



published on TradingView.com, Aug 15, 2023 18:16 UTC

BALTIME DRY INDEX, 10, INDEX: 1151 -41 (-3.60%)

10: The data vendor doesn't provide volume data for this symbol.



TradingView

Source: Trading View - <https://www.tradingview.com/chart/?symbol=INDEX%3ABDI>

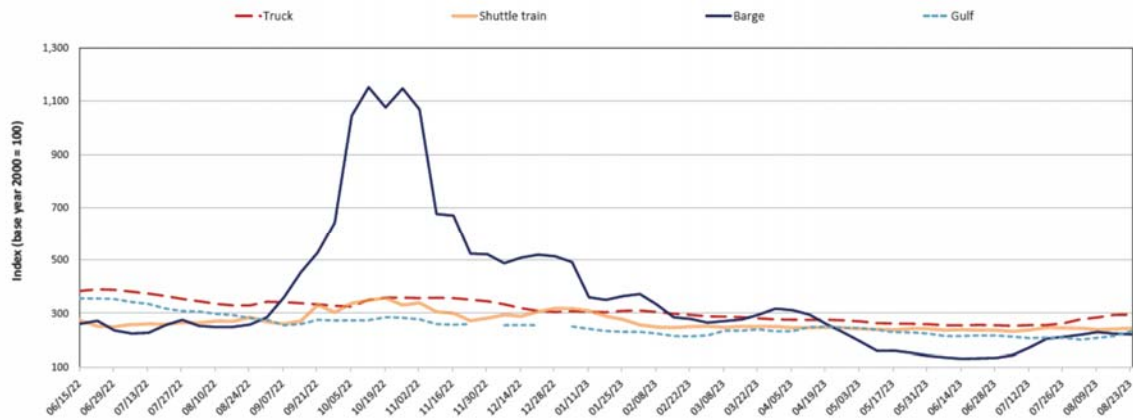
### Dry Bulk Index – 1151

24<sup>th</sup> August 2023 - 1151

8<sup>th</sup> October 2021 - 5650

1<sup>st</sup> May 2008 - 11793

## Ocean Freight Overview Barge Freight



Source: USDA, Agricultural Marketing Service.

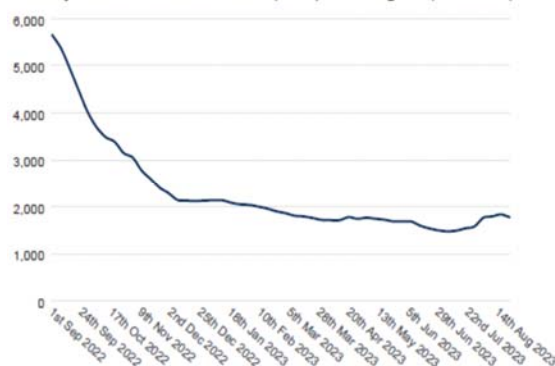
### Thursday, 23 August 2023

- U.S. exports remain slow, with poor demand for south bound barge freight
- Concerns increasing for "low water" on the Lower Mississippi during the fall harvest period and through the winter

Source: USDA Grain Transportation Report

## Ocean Freight Overview Container Freight Index

Drewry World Container Index (WCI) - 24 Aug 23 (US\$/40ft)



### Our detailed assessment for Thursday, 27 July 2023

- The composite index has decreased by 3.5% to \$1,768.33 this week, and has dropped by 70.5% when compared with the same week last year.
- The latest Drewry WCI composite index of \$1,768.33 per 40-foot container is now 83% below the peak of \$10,377 reached in September 2021. It is 34% lower than the 10-year average of \$2,682, indicating a return to more normal prices, but remains 24% higher than average 2019 (pre-pandemic) rates of \$1,420.
- The average composite index for the year-to-date is \$1,772 per 40ft container, which is \$910 lower than the 10-year average (\$2,682 mentioned above).

Source: Freightos - <https://fbx.freightos.com/>

### Freightos West Coast N.A. – China/East Asia Container Index - Daily

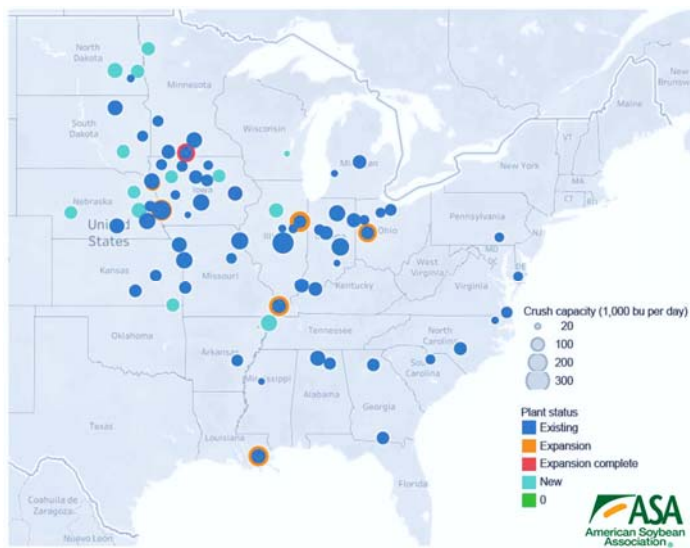


Source: <https://fbx.freightos.com/>

# OILSEEDS

## Changing “Crush” Dynamics and Biofuels...

### Current Market Overview, Outlook & Issues U.S. Crushing Capacity



Soybean crushing capacity is expected to expand to meet growth in renewable diesel demand.

The announced 23 new or expanded crush plants would increase crush capacity by 34%.

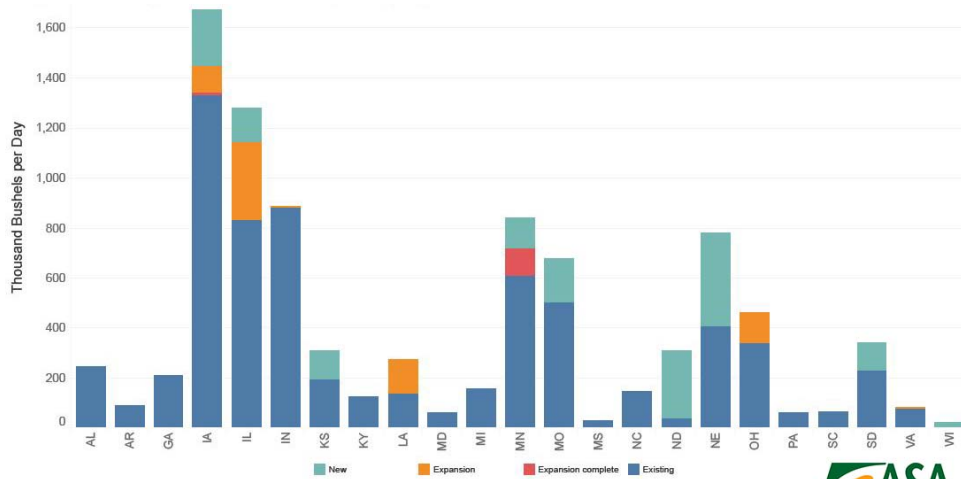
Of the 2.33 mbus/day of increased nameplate capacity, 120,000 has been built.

2023 to 2025 calendar years, estimate 430,000 to 530,000 bus/day of capacity planned. Up to 800,000 bus/day in 2026.

A number of these longer timeframe announcements are dependent on market and other factors for completion.

## Current Market Overview, Outlook & Issues

### U.S. Crushing Capacity by State

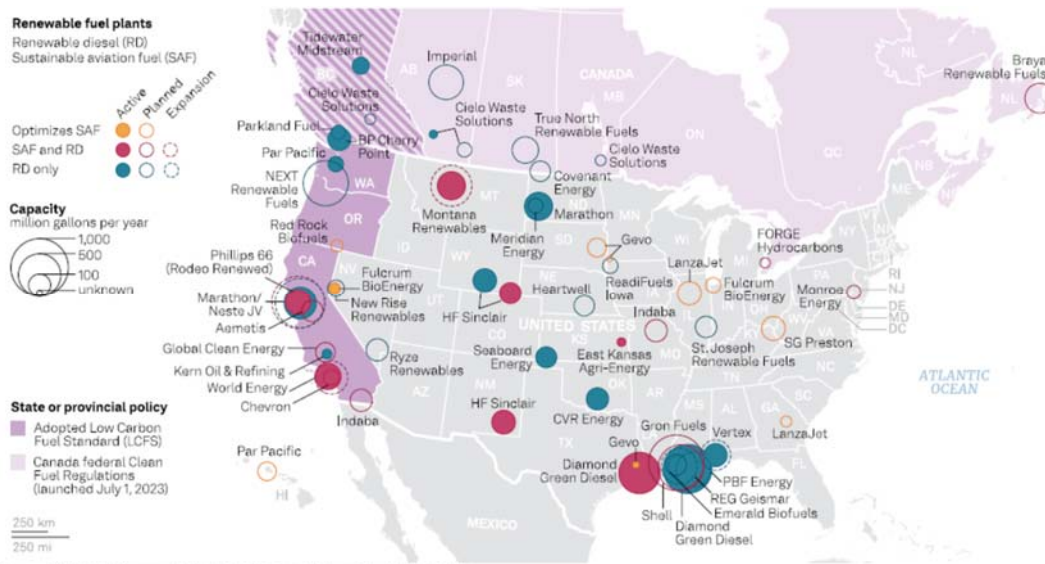


Source: Gordon Denny and American Soybean Association



## Current Market Overview, Outlook & Issues

### U.S. & Canada Renewable Fuel Plants



## Current Market Overview, Outlook & Issues

### U.S. & Canada Renewable Sources - Soybeans



- **World Soybeans**
  - Estimated seed production 405.3 mmts harvest in 23/22
  - Estimated crush capacity at 330.3 mmts, with oil production 62.1 mmts / meal 259.2 mmts in 22/23
  - Industrial and fuel consumption of 13.7 mmts,
- **U.S. Soybeans**
  - Estimated seed production 117.0 mmts harvest in 22/23
  - Estimated crush capacity at 62.6 mmts, with oil production 12.3 mmts / meal 49.1 in 22/23
  - Industrial and fuel consumption of 5.6 mmts
- **Brazil Soybeans**
  - Estimated seed production 163 mmts harvest in 22/23,
  - Estimated crush capacity at 55.8 mmts, with oil production 10.7 mmts / meal 43.2 mmts in 22/23
  - Industrial and fuel consumption of 4.5 mmts,
- **Argentina Soybeans**
  - Estimated seed production 48.0 mmts harvest in 22/23
  - Estimated crush capacity at 36.3 mmts, with oil production 7.2 mmts / meal 28.3 mmts in 22/23
  - Industrial and fuel consumption of 2.1 mmts,



## Current Market Overview, Outlook & Issues

### U.S. & Canada Renewable Sources - Canola



- **World Canola / Rapeseed**
  - Estimated seed production 88.3 mmts harvest in 22/23
  - Estimated crush capacity at 81.1 mmts, with oil production 32.9 mmts / meal 47.3 mmts in 22/23
  - Industrial and fuel consumption of 9.00 mmts,
- **Canadian Canola**
  - Estimated seed production 19.0 mmts harvest in 22/23, with projected 26 mmts harvest by 2025
  - Estimated crush capacity at 10.0 mmts, with oil production 4.2 mmts / meal 5.9 mmts in 22/23
  - Industrial and fuel consumption of 0.34 mmts,
  - 14 crush plants with 11.1 mmts, with announced 5.7 mmts more capacity by 2025, with a projected 15 mmts crush
- **U.S. Canola / Rapeseed**
  - Estimated seed production 1.7 mmts harvest in 22/23
  - Estimated crush capacity at 1.9 mmts, with oil production 0.81 mmts / meal 1.16 in 22/23
  - Industrial and fuel consumption of 1.13 mmts (imports from Canada),
  - Canola Council of Canada estimates 6.5 mmts of canola consumed for feedstock in US by 2030, yielding 2.86 mmts of oil (6.31 billion lbs)



## Current Market Overview, Outlook & Issues

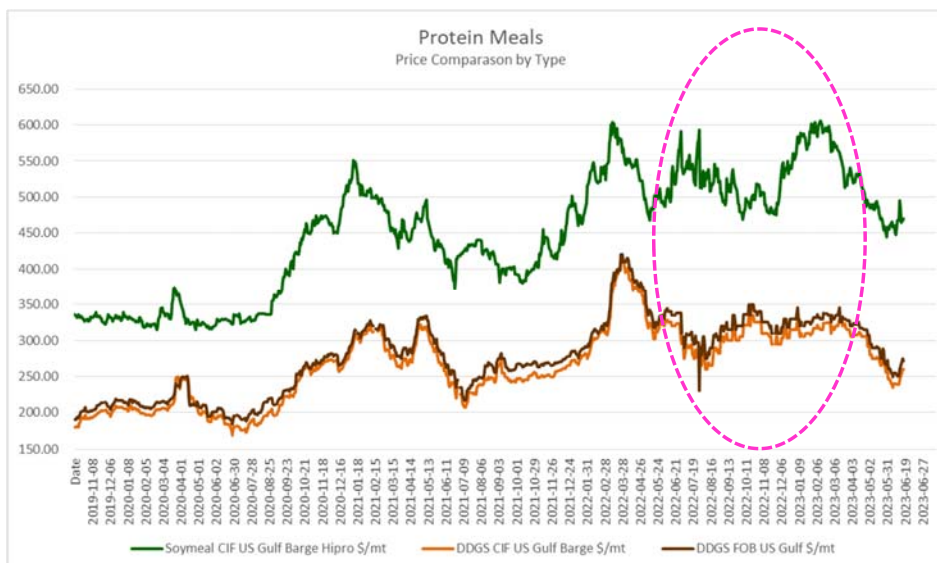
### U.S. & Canada Renewable Sources - Novel

- **Camelina** (Global Clean Energy)
  - Enough seed for 220k acres in 2022, aiming for more than 1 million acres across US High Plains
  - Camelina R&D gallons from 2022
  - ExxonMobil 5-year commitment for 220 million
- **Carinata Brassica** (Nuseed)
  - Commercially grown in Argentina, shipped to EU for feedstock;
  - targeting acres in US Southeast,
  - BP 10-year agreement with BP
- **Penny-Cress / CoverCress**
  - 8-10k acres in Illinois/Missouri in 2022,
  - aiming for 100k acres in 2025, 3 million acres by 2030
  - Bunge to crush product, Chevron to purchase oil feedstock



## Current Market Overview, Outlook & Issues

### U.S. SBM CIF NOLA vs DDGS CIF NOLA, FOB



#### 4 Year History

Prices reasonably correlated as SBM drives the pricing relationship across the protein complex.

#### June 22 – March 23

SBM volatility due to Argentina drought and production shortfall and its impact on world meal prices?

U.S. corn export forecast has literally gone south since December with the USDA cutting 425 mbu/20% from its estimate.



Source: Barchart - <https://www.barchart.com/futures/quotes/ZSH21/interactive-chart>



# WEATHER

## La Nina to El Nino...

### Weather Impacts Southern Oscillation Index – La Nina

#### ENSO Outlook is at LA NIÑA.

The Bureau's El Niño Alert continues, with El Niño development considered likely in the coming weeks, despite the current lack of atmospheric response.

When El Niño Alert criteria have been met in the past, an El Niño event has developed around 70% of the time.

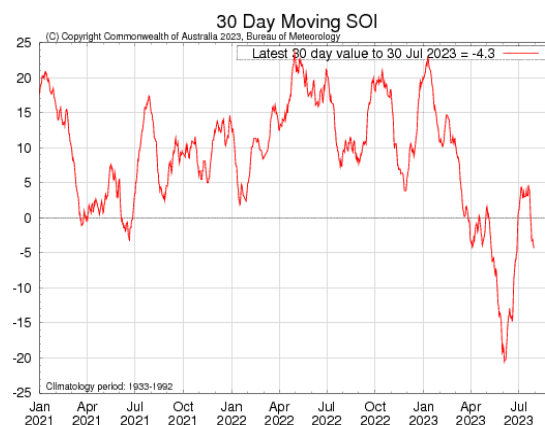
Sea surface temperatures (SSTs) in the tropical Pacific are exceeding El Niño thresholds, with climate models indicating this is likely to continue at least through to the end of the year.

In the atmosphere, however, wind, cloud and broad-scale pressure patterns mostly continue to reflect neutral ENSO conditions. This means the Pacific Ocean and atmosphere have yet to become fully coupled, as occurs during El Niño events.

#### Southern Oscillation Index

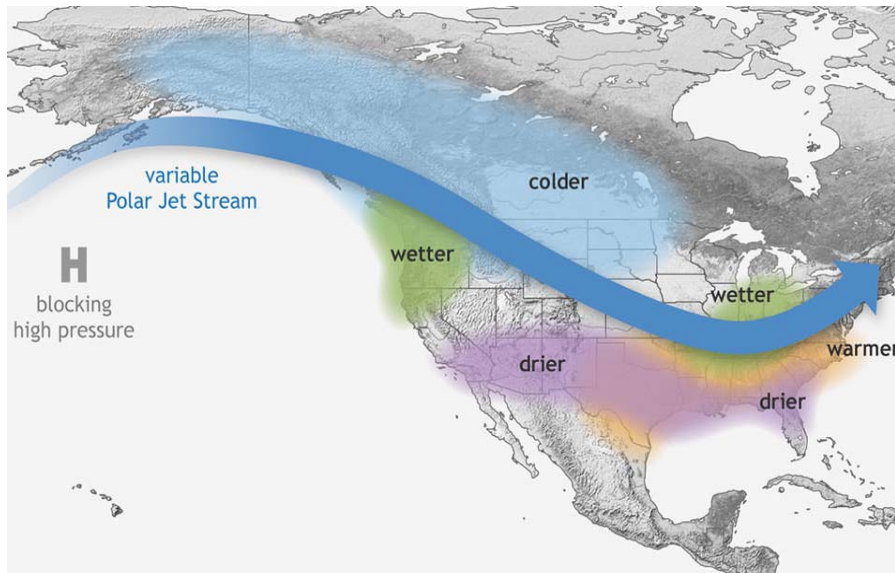
The 30-day Southern Oscillation Index (SOI) for the period ending 30 July 2023 was  $-4.3$ , with the value decreasing from  $+3.9$  over the past fortnight. The 60-day SOI and the 90-day SOI were  $-2.7$  and  $-7.9$ , respectively.

Sustained negative values of the SOI below  $-7$  typically indicate El Niño, while sustained positive values above  $+7$  typically indicate La Niña.



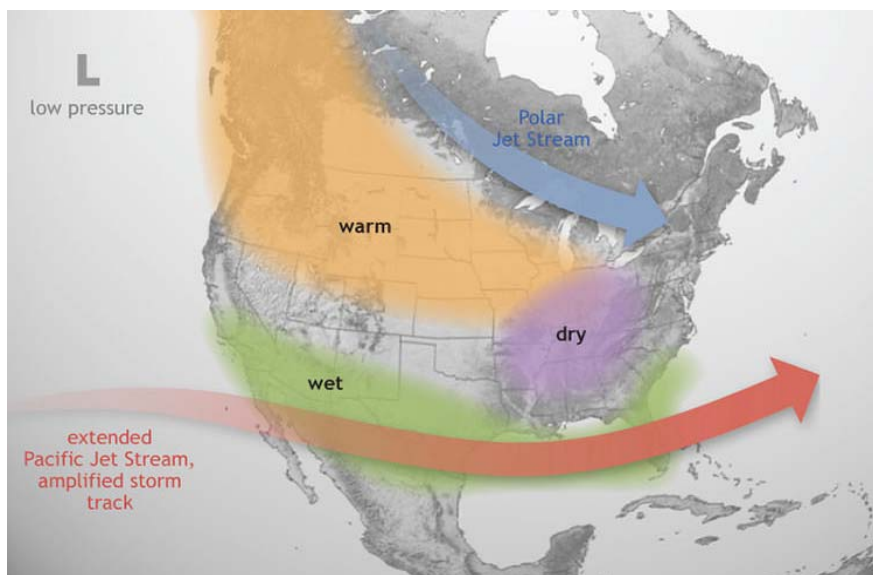


## Weather Impacts Southern Oscillation Index – La Nina



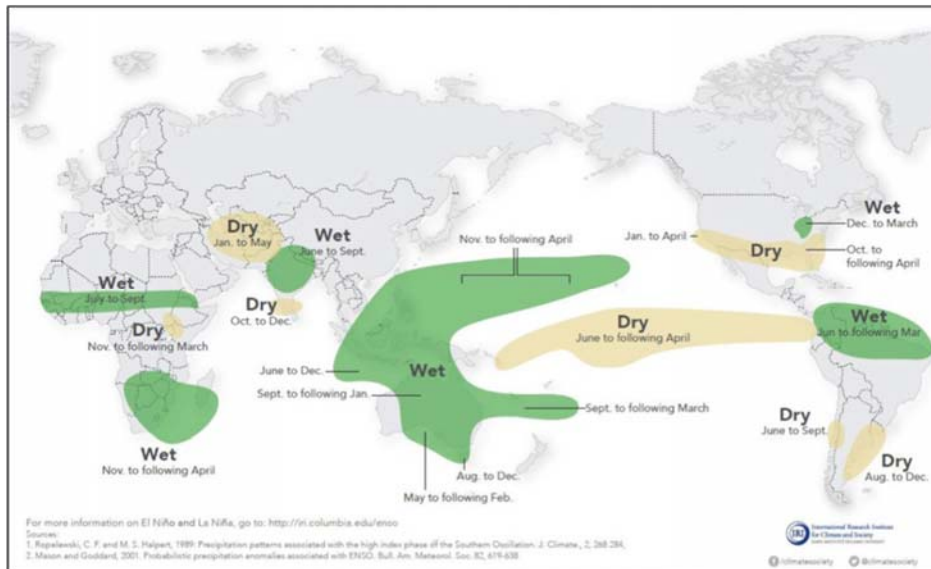
La Niña causes the jet stream to move northward and to weaken over the eastern Pacific. During La Niña winters, the South sees warmer and drier conditions than usual. The North and Canada tend to be wetter and colder.

## Weather Impacts Southern Oscillation Index – El Nino



El Niño causes the Pacific jet stream to move south and spread further east. During winter, this leads to wetter conditions than usual in the Southern U.S. and warmer and drier conditions in the North.

## Weather Impacts Southern Oscillation Index – La Nina



Source: <https://www.civilaffairsassoc.org/post/impacts-of-la-ni%C3%B1a-on-global-agriculture-what-can-the-u.s.army-do-about-it>

### Dry

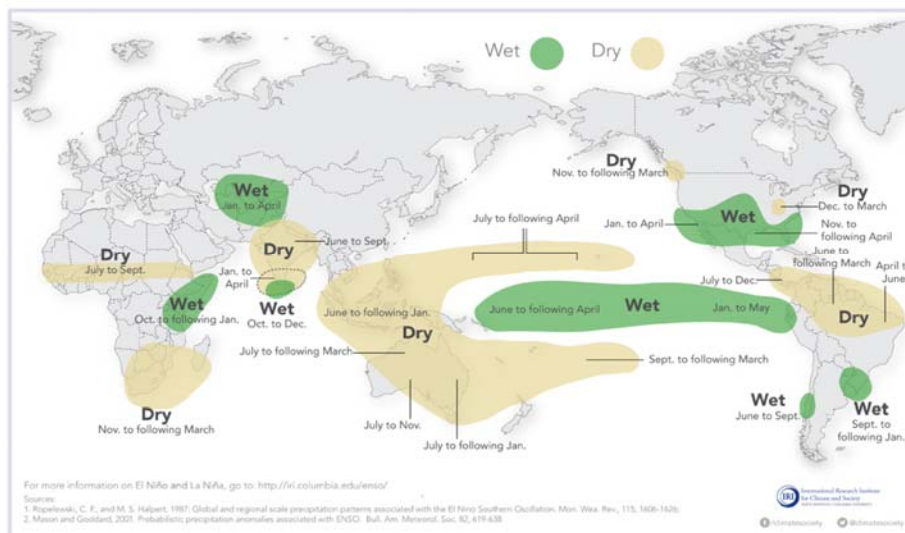
- Southern U.S.
- Argentina
- S. Brazil
- Middle East
- S. India
- East Central Africa

### Wet

- N. South America
- Australia
- Indonesia
- Philippines
- Central & Northern India
- Sud-Sahara Africa
- Southern Africa

## Weather Impacts Southern Oscillation Index – El Nino

El Niño conditions in the tropical Pacific are known to shift rainfall patterns in many different parts of the world. Although they vary somewhat from one El Niño to the next, the strongest shifts remain fairly consistent in the regions and seasons shown on the map below.



### Dry

- NE. U.S. Cornbelt
- N. South America
- Australia
- Indonesia
- Philippines
- Central & Northern India
- Sud-Sahara Africa
- Southern Africa

### Wet

- Southern U.S.
- N. Argentina
- S. Brazil
- Central Chile
- N. Central Asia
- S. India
- East Central Africa

Source: <https://www.civilaffairsassoc.org/post/impacts-of-la-ni%C3%B1a-on-global-agriculture-what-can-the-u.s.army-do-about-it>

# THANK YOU FOR YOUR ATTENTION

---

...

## Disclaimer

This material and information is intended for educational use and professional development. It is not intended, nor does it necessarily represent enforceable standards, industry consensus, mandatory requirements, nor all possible solutions or ideas.

The information and data contained herein have been obtained from sources believed to be reliable, but IGP-KSU does not warrant their accuracy or completeness. Recommendations and opinions contained herein reflect the judgment of the presenter as of the date presented, are subject to change, and are based on certain assumptions, only some of which are noted herein. Different assumptions could yield substantially different results.

You are cautioned that there is no universally accepted method for analyzing markets or financial instruments. IGP-KSU does not guarantee any results, and there is no guarantee as to the liquidity of the instruments presented in the lesson or involved in our analysis. Neither the information nor the recommendations and opinions expressed herein constitutes an offer to sell or buy any security, futures or option contract, or other instrument.

As a matter of policy, IGP-KSU does not give market, tax, accounting, regulatory or legal advice to clients. Participants therefore should consult their own advisors regarding the market, tax, accounting, and legal implications of the recommended strategies before transactions are affected. Information relating to past performance is not necessarily indicative of future results. Reproduction in any form without IGP's expressed written consent is strictly forbidden.

The mention of trade names, commercial products or organizations does not imply or express endorsement by Kansas State University, its employees, or cooperating companies and individuals.



## IGP Institute

**KANSAS STATE**  
**UNIVERSITY**

IGP Institute  
Department of Grain Science and Industry

1980 Kimball Avenue 102 IGP Conference Center | Manhattan, KS 66506-7000  
Tel. 785-532-4070 | Fax 785-532-6080 | [www.grains.k-state.edu/igp](http://www.grains.k-state.edu/igp) | [igp@ksu.edu](mailto:igp@ksu.edu)